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	Patent Number	6,795,231 B1 19634 179	
	Issue Date	September 21, 2004	
	First Named Inventor	Waclaw C. Koscielniak	
	Group Art Unit	2873	
	Examiner Name	Tuyen Q. Tra	
Total Number of Pages in This Submission	10	Attorney Docket Number	100-15210 (P05000-D01)

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## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Mark C. Pickering, Reg. No. 36,239
Signature	
Date	September 28, 2004

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PATENT

Attorney Docket No. 100-15210 [P05000-D01]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of ) Group Art Unit: 2873  
Waclaw C. Koscielniak )  
U.S. Pat. No. 6,795,231 B1 ) Examiner: Tuyen Q. Tra  
Issued: September 21, 2004 ) REQUEST FOR CERTIFICATE OF  
For: PHOTONIC CRYSTALS USING A ) CORRECTION OF PATENT FOR PTO  
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FABRICATION PROCESS (as )  
amended) )  
MISTAKES § 37 CFR 1.322(a)  
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This Certificate is necessitated through fault of the U.S. Patent and Trademark Office and no fee is required.

On the Cover Page,

At (57) after "the Abstract" delete "6 Claims" and insert --22 Claims--.

Claims 7-22 should be printed as follows:

--7. A photonic crystal formed on a semiconductor material of a first conductivity type, the semiconductor material having a top surface, the photonic crystal comprising:

    a diffusion region of a second conductivity type formed in the semiconductor material; and

    a plurality of spaced-apart stacks formed on the semiconductor material over the diffusion region, each stack having a plurality of layers of material and extending away from the top surface of the semiconductor material.

8. The crystal of claim 7 wherein the plurality of layers of material alternate between a first layer of material and a second layer of material, the first layer of material having a first dielectric constant, the second layer of material having a second dielectric constant.

9. The crystal of claim 8 and further comprising an interstack material formed over the semiconductor material between and adjoining the plurality of stacks.

10. The crystal of claim 9 wherein the interstack material has a top surface that is substantially coplanar with a top surface of each stack.

11. The crystal of claim 9 wherein the interstack material has a top surface that lies below a top surface of each stack.

12. The crystal of claim 9 wherein the interstack material has a top surface that lies above a top surface of each stack.

13. The crystal of claim 7 and further comprising an interstack material formed over the semiconductor material between and adjoining the plurality of stacks, the interstack material having a top surface that is substantially coplanar with a top surface of each stack.

14. The crystal of claim 7 and further comprising an interstack material formed over the semiconductor material between and adjoining the plurality of stacks, the interstack material having a top surface that lies below a top surface of each stack.

15. The crystal of claim 7 and further comprising an interstack material formed over the semiconductor material between and adjoining the plurality of stacks, the interstack material having a top surface that lies above a top surface of each stack.

16. A photonic crystal formed on a semiconductor material of a conductivity type, the semiconductor material having a top surface, the photonic crystal comprising:  
an array of spaced-apart stacks formed on the semiconductor material, each stack having a plurality of layers of material and extending away from the top surface of the semiconductor material, the plurality of layers of material alternating between a first layer of material and a second layer of material, the first layer of material having a first dielectric constant, the second layer of material having a second dielectric constant; and  
an interstack material formed over the semiconductor material between and

adjoining the plurality of stacks.

17. The crystal of claim 16 wherein the interstack material has a top surface that is substantially coplanar with a top surface of each stack.

18. The crystal of claim 16 wherein the interstack material has a top surface that lies below a top surface of each stack.

19. The crystal of claim 16 wherein the interstack material has a top surface that lies above a top surface of each stack.

20. The crystal of claim 16 wherein the interstack material has a top surface that is substantially coplanar with a top surface of each stack.

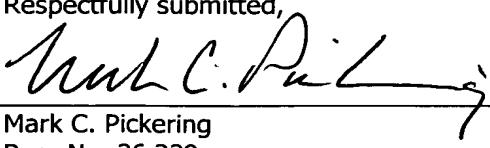
21. The crystal of claim 16 wherein the interstack material has a top surface that lies below a top surface of each stack.

22. The crystal of claim 16 wherein the interstack material has a top surface that lies above a top surface of each stack.--

Please send the Certificate to:

Mark C. Pickering, Esq.  
Law Offices of Mark C. Pickering  
P.O. Box 300  
Petaluma, CA 94953-0300  
Customer No. 33402

Dated: 9-28-04

Respectfully submitted,  
By:   
Mark C. Pickering  
Reg. No. 36,239

Attorney for Assignee

OCT 08 2004

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO: 6,795,231 B1

DATED: September 21, 2004

INVENTOR(S): Koscielniak

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Cover Page,

At (57) after "the Abstract" delete "6 Claims" and insert --22 Claims--.

Claims 7-22 should be printed as follows:

--7. A photonic crystal formed on a semiconductor material of a first conductivity type, the semiconductor material having a top surface, the photonic crystal comprising:

a diffusion region of a second conductivity type formed in the semiconductor material; and

a plurality of spaced-apart stacks formed on the semiconductor material over the diffusion region, each stack having a plurality of layers of material and extending away from the top surface of the semiconductor material.

8. The crystal of claim 7 wherein the plurality of layers of material alternate between a first layer of material and a second layer of material, the first layer of material having a first dielectric constant, the second layer of material having a second dielectric constant.

9. The crystal of claim 8 and further comprising an interstack material formed over the semiconductor material between and adjoining the plurality of stacks.

10. The crystal of claim 9 wherein the interstack material has a top surface that is substantially coplanar with a top surface of each stack.

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an interstack material formed over the semiconductor material between and adjoining the plurality of stacks.

17. The crystal of claim 16 wherein the interstack material has a top surface that is substantially coplanar with a top surface of each stack.

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19. The crystal of claim 16 wherein the interstack material has a top surface that lies above a top surface of each stack.
20. The crystal of claim 16 wherein the interstack material has a top surface that is substantially coplanar with a top surface of each stack.
21. The crystal of claim 16 wherein the interstack material has a top surface that lies below a top surface of each stack.
22. The crystal of claim 16 wherein the interstack material has a top surface that lies above a top surface of each stack.--

MAILING ADDRESS OF SENDER:  
Mark C. Pickering  
Law Offices of Mark C. Pickering  
P.O. Box 300  
Petaluma, CA 94953-0300  
Customer No. 33402

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**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO: 6,795,231 B1

DATED: September 21, 2004

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an interstack material formed over the semiconductor material between and adjoining the plurality of stacks.

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